Techniques needed and shape

Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Phyllophoraceae
delicate blistered fronds

*Descriptive name

delicate blistered fronds

Features

1. plants 10-40mm tall consist of wiry, branched stalks (stipes) and narrow, delicate red-brown or pink blades, often forked, about 30mm long

2. sporangial clusters (sori) are blister-like, produced and released leaving scars successively in bands across the blades upwards towards the blade tip

Occurrences

from the Mediterranean, Europe, Britain and S. Africa. In Australia, from N Spencer Gulf. S Australia, Victoria, SE Tasmania and Port Hacking, NSW

Usual Habitat

plants with sponge basally are often found under jetties in shade or on molluscs at depth

Special requirements

1. cut a cross section to find large, closely packed, equal-sided (parenchymatous) cells in the core (medulla) and outer (cortex) layers of several rows of small cells facing outwards

2. if possible, find sporangial plants with bands of raised “blisters”. Cut a cross section to find chains of tetrasporangia, divided in a cross (cruciate) pattern when mature

if wiry fronds are not present the fronds superficially look like Stenogramme, but Stenogramme has scattered patches of tetrasporangial clusters (sori)

Similar Species

if wiry fronds are not present the fronds superficially look like Stenogramme, but Stenogramme has scattered patches of tetrasporangial clusters (sori)

Description in the Benthic Flora

Part IIIA, pages 262–264

Details of Anatomy

Cross sections of Schottera nicaeensis stained blue and viewed microscopically

1. a stalk (stipe) with core (medulla, med) of equal-sided cells and outer layer (cortex, co) of small outwardly facing cells (A72653 slide 20588)

2. a blade (A72653 slide 20587)

3. a blade with a sporangial pustule (sorus) of tetrasporangial chains (t sp chn) (A72653 slide 20588)

4. extruded tetrasporangia some showing cross-shaped (cruciate) division (A60173 slide 11543)

* Descriptive names are inventions to aid identification, and are not commonly used

Prepared September 2005, additions September 2009
Specimens of *Schottera nicaensis* (Lamouroux *ex* Duby) *Guiry & Hollenberg*

5. 6. 7. enlargements of specimens growing between the hairs of the mussel, *Trichomya*, 24m deep at Stony Point, N of Whyalla, S Australia (*A7263*), showing the delicate blades, prominent red sporangial masses (sori) and pale scars of extruded sori (arrowed)

8. 9. two magnifications of pressed specimens with more prominent stalks and proliferating blades found in late summer, 5-7m deep on mussels at Port Phillip Bay, Victoria (*A3948*2)

10. specimens with more forked blades and proliferations possibly a result of damage attached to floating seagrass (*Amphibolis*) Glenelg, S Australia (*A61719*)

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Prepared September 2005, additions September 2009